

**Step 10 (cont.)**

**Procedure:** (continued from previous page) Babbitt fixture (#X15): Saw the  $\frac{3}{4}$ " dia. x 1" CRS. lengthwise. Drill the  $\frac{1}{4}$ " x 1" x  $2\frac{1}{4}$ " and tack-weld the half rounds in center. File welds flat and tack-weld to center of 2" x 2" x  $\frac{1}{4}$ ". Drill and tap 10-32 in top and make clamp. Smoke the fixture with torch, clamp and bolt blocks in place, heat and pour babbitt. Remove from fixture, bolt together, chuck and bore, groove, etc.

Connecting Rod (#112): Take the  $\frac{1}{4}$ " x  $\frac{3}{4}$ " x  $2\frac{1}{8}$ " CRS. drilled and tapped with part #113 and drill the  $\frac{5}{8}$ " hole. Braze to  $\frac{3}{8}$ " pipe, as per print. Chuck pipe and face  $\frac{1}{4}$ " x  $\frac{3}{4}$ " x  $2\frac{1}{8}$ ". Add  $\frac{1}{8}$ " pipe coupling the  $\frac{3}{4}$ " dia. x  $\frac{15}{16}$ " CRS. wrist pin boss, drill and ream. *Don't forget the wood plug.*

**Step 11**

**PISTON:** Sheet #6

**Part:** #114

**Material:**  $2\frac{1}{2}$ " dia. castiron

**Procedure:** Face both ends, finish turn O.D. and grooves. Layout the bottom end as shown. Drill the outer #1 holes first, then #2 holes, to  $1\frac{1}{2}$ " deep. Chuck in lathe, drill 1" hole  $2\frac{1}{8}$ " deep in center. Finish boring cavity. Next using lathe as a hand cranked shaper, flatten wrist pin bosses and remove drilling webs. Drill and ream wrist pin hole.

**Step 12**

**WRIST PIN and WRIST PIN RETAINERS:** Sheet #6

**Parts:** #115 and #116

**Materials:**  $\frac{7}{16}$ " dia. x  $1\frac{3}{4}$ " CRS.,  $\frac{3}{8}$ " dia x  $\frac{3}{4}$ " brass, bronze, or aluminum.

**Procedure:** Follow print.

**Step 13**

**PISTON RINGS:** Sheet #6

**Parts:** #117, #X08, and #X09

